

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028510 A3

(51) International Patent Classification⁷: C07K 16/00,
16/08, 16/44, 16/40, A61K 39/385, G01N 33/574, 33/53

(21) International Application Number:
PCT/RU2004/000373

(22) International Filing Date:
24 September 2004 (24.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003128660 25 September 2003 (25.09.2003) RU

(71) Applicants and

(72) Inventors: KISELEV, Vsevolod Ivanovich [RU/RU];
Bolshoi Cheremushkinsky, 25-16, Moscow, 113149
(RU). SVESHNIKOV, Petr Georgiyevich [RU/RU];
Simpheropolsky Blvd., 37/14-28, Moscow, 117639 (RU).

(74) Agents: EGOROVA, Galina et al.; Law Firm Gorodissky
& Partners Ltd., B. Spasskaya ul., 25, stroenie 3, Moscow,
129010 (RU).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

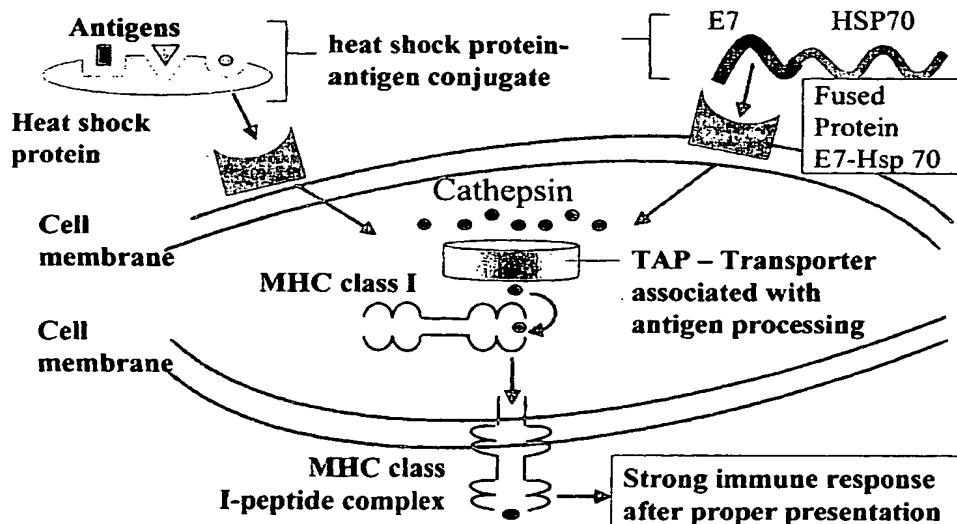
Published:

— with international search report

(88) Date of publication of the international search report:
25 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS, KITS, AND COMPOSITIONS FOR THE DEVELOPMENT AND USE OF MONOCLONAL ANTIBODIES SPECIFIC TO ANTIGENS OF LOW IMMUNOGENICITY



WO 2005/028510 A3

(57) Abstract: The invention relates to the development and use of monoclonal antibodies specific to antigens of low immunogenicity. The present invention provides methods of producing monoclonal antibodies by chemically conjugating the antigen of interest to a carrier molecule that enables the immune system to respond to immunization with the conjugated antigen. The invention also provides particular compositions of conjugated antigens as well as of monoclonal antibodies specific for those conjugated antigens. The present invention also provides kits for use in detecting disease conditions using the monoclonal antibodies.